

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 01/10/2024 Revision date: 10/09/2024 Supersedes version of: 28/04/20 Supersedes version of: 28/04/2022

Version: 11.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Mixture

Trade name CFS-IS / CP 611A JMHX-0X17-F22F-D68P

Swiss CPID No 252485-19 Product code **BU Fire Protection**

Type of product Sealants

Product group Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category

Professional use Industrial/Professional use spec For professional use only Firestop intumescent sealant Use of the substance/mixture

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti (Schweiz) AG Hilti AG

Feldkircherstraße 100 Soodstrasse 61 CH 8134 Adliswil FL 9494 Schaan Schweiz Liechtenstein

T +41 844 84 84 85, F +41 844 84 84 86 T +423 234 2111 product.compliance-fire.protection@hilti.com info@hilti.ch

1.4. Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number):

GBK GmbH Global Regulatory Compliance

Department issuing data specification sheet

+49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 H317 Reproductive toxicity, Category 2 H361 Hazardous to the aquatic environment - Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS07 Signal word (CLP) Warning

Contains 1,2-Benzisothiazol-3(2H)-on; 2-octyl-2H-isothiazol-3-one; hexaboron dizinc undecaoxide,

heptahydrate; Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-

3(2H)-one; polypropylene glycol alkyl phenyl ether

Hazard statements (CLP) H317 - May cause an allergic skin reaction.

H361 - Suspected of damaging the unborn child.. H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) P280 - Wear protective gloves, eye protection, protective clothing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-octyl-2H-isothiazol-3-one (26530-20-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
pyrithione zinc (13463-41-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
aluminium hydroxide (21645-51-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
polypropylene glycol alkyl phenyl ether (9064-13-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Component	
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
polypropylene glycol alkyl phenyl ether (9064-13-5)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
pyrithione zinc (13463-41-7)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
2-octyl-2H-isothiazol-3-one (26530-20-1)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
aluminium hydroxide Stoff mit nationalem Arbeitsplatzgrenzwert (CH)	CAS-No.: 21645-51-2 EC-No.: 244-492-7 REACH-no: 01-2119529246- 39	10 – 25	Not classified
hexaboron dizinc undecaoxide, heptahydrate	CAS-No.: 138265-88-0 EC-No.: 235-804-2	5 – 10	Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 2, H411
polypropylene glycol alkyl phenyl ether	CAS-No.: 9064-13-5 EC-No.: 618-605-9	2.5 – 5	Skin Sens. 1B, H317
1,2-Benzisothiazol-3(2H)-on	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-	0.01 - <0.036	Acute Tox. 4 (Oral), H302 (ATE=490 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410



Safety Data Sheet

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
pyrithione zinc	CAS-No.: 13463-41-7 EC-No.: 236-671-3 EC Index-No.: 613-333-00-7 REACH-no: 01-2119511196- 46	0.001 - 0.01	Acute Tox. 3 (Oral), H301 (ATE=177 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=1 mg/l/4h) Acute Tox. 2 (Inhalation:dust,mist), H330 (ATE=1 mg/l/4h) Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)
2-octyl-2H-isothiazol-3-one Stoff mit nationalem Arbeitsplatzgrenzwert (CH)	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	0.001 - 0.01	Acute Tox. 2 (Inhalation), H330 (ATE=0.27 mg/l) Acute Tox. 3 (Dermal), H311 (ATE=311 mg/kg bodyweight) Acute Tox. 3 (Oral), H301 (ATE=125 mg/kg bodyweight) Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one Stoff mit nationalem Arbeitsplatzgrenzwert (CH)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	0.0001 – 0.001	Acute Tox. 3 (Oral), H301 (ATE=66 mg/kg bodyweight) Acute Tox. 2 (Dermal), H310 (ATE=50 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=0.05 mg/l/4h) Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
1,2-Benzisothiazol-3(2H)-on	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-	(0.036 ≤ C ≤ 100) Skin Sens. 1, H317	
2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	(0.0015 ≤ C ≤ 100) Skin Sens. 1A, H317	



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	$(0.0015 \le C \le 100)$ Skin Sens. 1A, H317 $(0.06 \le C < 0.6)$ Skin Irrit. 2, H315 $(0.06 \le C < 0.6)$ Eye Irrit. 2, H319 $(0.6 \le C \le 100)$ Skin Corr. 1C, H314 $(0.6 \le C \le 100)$ Eye Dam. 1, H318	

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general Never give anything by mouth to an unconscious person. IF exposed or concerned: Get

medical advice/attention.

Allow affected person to breathe fresh air. Allow the victim to rest. First-aid measures after inhalation

First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water,

> followed by warm water rinse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Wash contaminated clothing before reuse.

First-aid measures after eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation May cause an allergic skin reaction. Symptoms/effects after skin contact May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Do not use a heavy water stream. Unsuitable extinguishing media

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

10/09/2024 (Version: 11.3) CH - en 5/19



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away

from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood.

Hygiene measures Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep only in the original container in a cool, well ventilated place away from : Keep

container closed when not in use.

Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5-25 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not

relevant for this product.

8.1.1. National occupational exposure and biological limit values

2-octyl-2H-isothiazol-3-one (26530-20-1)	
Switzerland - Occupational Exposure Limits	
Local name	2-n-Octyle-2,3-dihydroisothiazole-3-one
MAK (OEL TWA)	0.05 mg/m³
KZGW (OEL STEL)	0.1 mg/m³
Remark	4x15
aluminium hydroxide (21645-51-2)	
Switzerland - Occupational Exposure Limits	
Local name	Aluminium hydroxyde / Aluminiumhydroxid
Local name MAK (OEL TWA)	Aluminium hydroxyde / Aluminiumhydroxid 3 mg/m³ (a) / (a)
	, ,



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

aluminium hydroxide (21645-51-2)		
Remark	NIOSH	
Regulatory reference	www.suva.ch, 01.01.2023	
Switzerland - BAT		
Local name	Aluminium hydroxyde / Aluminiumhydroxid	
BAT	50 μg/g creatinine (0.21 μmol/mmol cr.; Paramètre biologique: Aluminium; Substrat d'examen: Urine; Moment du prélèvement: Exposition de longue durée: après plusieurs périodes de travail.) / (0.21 μmol/mmol cr.; Biologischer Parameter: Aluminium; Untersuchungsmaterial: Urin; Probennahmezeitpunkt: Bei Langzeitexposition: nach mehreren vorangegangenen Schichten.)	
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one ar	nd 2-methylisothiazol-3(2H)-one (55965-84-9)	
Switzerland - Occupational Exposure Limits		
Local name	2,3-Dihydro-isothiazol-3-one de 5-chloro-2-méthyle et 2,3-dihydro-isothiazol-3-one de 2-méthyle [2,3-Dihydro-isothiazol-3-one de 5-chloro-2-méthyle, 2,3-Dihydro-isothiazol-3-one	
	de 2-méthyle] / 5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on [2-Methyl-2,3-dihydroisothiazol-3-on, 5-Chlor-2-methyl-2,3-dihydroisothiazol-3-on]	
MAK (OEL TWA)	de 2-méthyle] / 5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on [2-Methyl-2,3-dihydroisothiazol-3-on, 5-Chlor-2-methyl-2,3-	
MAK (OEL TWA) KZGW (OEL STEL)	de 2-méthyle] / 5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on [2-Methyl-2,3-dihydroisothiazol-3-on, 5-Chlor-2-methyl-2,3-dihydroisothiazol-3-on]	
, ,	de 2-méthyle] / 5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on [2-Methyl-2,3-dihydroisothiazol-3-on, 5-Chlor-2-methyl-2,3-dihydroisothiazol-3-on] 0.2 mg/m³ (i) / (e)	
KZGW (OEL STEL)	de 2-méthyle] / 5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on [2-Methyl-2,3-dihydroisothiazol-3-on, 5-Chlor-2-methyl-2,3-dihydroisothiazol-3-on]	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):









Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses			EN 166, EN 170

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. ISO 374-1. Wear protective gloves.

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Physical state

Do not eat, drink or smoke during use. No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

dark grey. Colour Pasty. Appearance Molecular mass Not determined Odour characteristic. Odour threshold Not determined Melting point Not applicable Freezing point Not available Boiling point Not available Flammability Non flammable. Lower explosion limit Not applicable Upper explosion limit Not applicable Not applicable Flash point Auto-ignition temperature Not applicable Decomposition temperature Not available 8.5 рΗ

10/09/2024 (Version: 11.3)

CH - en

Solid

pH solution Not available Viscosity, kinematic Not applicable Solubility Not available

8/19



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Not available Vapour pressure at 50°C Not available Density 1.4 g/cm³ Relative density Not available Not applicable Relative vapour density at 20°C Particle size Not available Particle size distribution Not available Particle shape Not available Particle aspect ratio Not available Particle specific surface area Not available Particle dustiness Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
LD50 oral rat	490 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	670 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg



Safety Data Sheet

550 mg/kg (Rat, Literature study, Oral)
355 mg/kg
690 mg/kg bodyweight (Rabbit, Literature study, Dermal)
311 mg/kg
> 2 mg/m³ (4 h, Rat, Literature study, Inhalation (vapours))
0.586 mg/l/4h
177 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 269 mg/kg bodyweight; Rat; Experimental value)
> 2000 mg/kg (Rat; Experimental value)
1 mg/l/4h (Rat; Literature study)
ate (138265-88-0)
> 5000 mg/kg bodyweight (FIFRA (40 CFR), Rat, Male / female, Experimental value of similar product, Oral, 14 day(s))
> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value of similar product, Dermal, 14 day(s))
> 4.95 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Readacross, Inhalation (dust), 14 day(s))
> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol), 14 day(s))
l)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)
66 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Calculated by reference to active substance, Oral, 14 day(s))
> 141 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
0.17 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Inhalation (dust), 14 day(s))
064-13-5)
> 5000 mg/kg
Not classified
pH: 8.5 Based on available data, the classification criteria are not met
Not classified
pH: 8.5 Based on available data, the classification criteria are not met
May cause an allergic skin reaction.
may badoc an allorgic skill reaction.
Not classified
Not classified Based on available data, the classification criteria are not met



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Additional information Based on available data, the classification criteria are not met

Reproductive toxicity Suspected of damaging the unborn child..

STOT-single exposure Not classified

Additional information Based on available data, the classification criteria are not met

STOT-repeated exposure Not classified

Additional information Based on available data, the classification criteria are not met

pyrithione zinc (13463-41-7) STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure. Aspiration hazard Not classified

Additional information

Based on available data, the classification criteria are not met

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and

symptoms

Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

Harmful to aquatic life with long lasting effects.

Not classified

Harmful to aquatic life with long lasting effects

(chronic)	naming to aquatic life with long lasting effects.	
1,2-Benzisothiazol-3(2H)-on (2634-33-5)		
LC50 - Fish [1]	2.18 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)	
EC50 - Crustacea [1]	0.99 mg/l	
ErC50 algae	150 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitate Experimental value, GLP)	
2-octyl-2H-isothiazol-3-one (26530-20-1)		
LC50 - Fish [1]	0.14 mg/l (96 h, Pimephales promelas, Literature study)	
LC50 - Fish [2]	0.05 mg/l (96 h, Oncorhynchus mykiss, Literature study)	
EC50 - Crustacea [1]	0.18 mg/l (48 h, Daphnia magna, Literature study)	
EC50 - Crustacea [2]	0.32 mg/l (48 h, Daphnia magna, Literature study)	
NOEC chronic fish	0.012 mg/l	
pyrithione zinc (13463-41-7)		
LC50 - Fish [1]	2.6 µg/l (96 h; Pimephales promelas; GLP)	
LC50 - Fish [2]	0.4 mg/l (96 h; Cyprinodon variegatus; GLP)	
EC50 - Crustacea [1]	0.05 mg/l (48 h; Daphnia magna; GLP)	
EC50 - Crustacea [2]	8.2 µg/l (96 h; Daphnia magna; GLP)	
EC50 96h - Algae [1]	1.3 μg/l (EPA OPP 122-2, Skeletonema costatum, Static system, Fresh water, Experimental value, GLP)	



Safety Data Sheet

pyrithione zinc (13463-41-7)	
Threshold limit - Algae [1]	0.067 mg/l (Selenastrum capricornutum)
Threshold limit - Algae [2]	2.4 μg/l (120 h; GLP)
hexaboron dizinc undecaoxide, heptahyo	Irate (138265-88-0)
LC50 - Fish [1]	169 μg/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Reac across)
EC50 - Crustacea [1]	155 – 413 μg/l (US EPA, 48 h, Ceriodaphnia dubia, Static system, Fresh water, Readacross)
aluminium hydroxide (21645-51-2)	<u>.</u>
LC50 - Fish [1]	> 218 mg/l (US EPA, 96 h, Pimephales promelas, Semi-static system, Fresh water, Experimental value of similar product, Aluminium)
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)
LC50 - Fish [1]	0.19 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP)
ErC50 algae	19.9 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)
polypropylene glycol alkyl phenyl ether (9064-13-5)
LC50 - Fish [1]	> 10 - < 100 mg/l Leuciscus idus
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (OECD-Richtlinie 202, Teil 1, statisch
EC50 72h - Algae [1]	> 100 mg/l
2.2. Persistence and degradability	
CFS-IS / CP 611A	
Persistence and degradability	May cause long-term adverse effects in the environment.
1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
Persistence and degradability	Not readily biodegradable in water.
2-octyl-2H-isothiazol-3-one (26530-20-1)	
Persistence and degradability	Inherently biodegradable.
pyrithione zinc (13463-41-7)	
Persistence and degradability	Biodegradable in water. No (test)data on mobility of the substance available.

2-octyl-2H-isothiazol-3-one (26530-20-1)		
Persistence and degradability	Inherently biodegradable.	
pyrithione zinc (13463-41-7)		
Persistence and degradability Biodegradable in water. No (test)data on mobility of the substance available.		
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
aluminium hydroxide (21645-51-2)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	



Safety Data Sheet

aluminium hydroxide (21645-51-2)		
ThOD	Not applicable (inorganic)	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)		
Persistence and degradability	Not readily biodegradable in water.	
12.3. Bioaccumulative potential		
CFS-IS / CP 611A		
Bioaccumulative potential	Not established.	
1,2-Benzisothiazol-3(2H)-on (2634-33-5)		
BCF - Fish [1]	6.62 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
2-octyl-2H-isothiazol-3-one (26530-20-1)		
BCF - Fish [1]	1280 (67 day(s), Lepomis macrochirus, Flow-through system, Literature study)	
Partition coefficient n-octanol/water (Log Pow)	2.45 (Experimental value)	
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).	
pyrithione zinc (13463-41-7)		
BCF - Other aquatic organisms [1]	7.87 – 11 (30 days; Crassostrea sp.)	
Partition coefficient n-octanol/water (Log Pow)	0.9 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)		
BCF - Fish [1]	116 – 60960 (21 day(s), Semi-static system, Marine water, Read-across, Fresh weight)	
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).	
aluminium hydroxide (21645-51-2)		
Bioaccumulative potential	Not bioaccumulative.	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)		
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
12.4. Mobility in soil		
4.2 Panyingthiagal 2/2H) on /2624 22 5)		

1,2-Benzisothiazol-3(2H)-on (2634-33-5)	
Surface tension	72.6 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2-octyl-2H-isothiazol-3-one (26530-20-1)		
Ecology - soil	No (test)data on mobility of the substance available.	
pyrithione zinc (13463-41-7)		
Surface tension	0.073 N/m (20 °C; 7220 μg/l)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.295 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Low potential for mobility in soil.	
hexaboron dizinc undecaoxide, heptahydrate (1382	65-88-0)	
Surface tension	Data waiving	
Ecology - soil	Adsorbs into the soil.	
aluminium hydroxide (21645-51-2)		
Ecology - soil	No (test)data on mobility of the substance available.	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)	
Ecology - soil	Highly mobile in soil.	

12.5. Results of PBT and vPvB assessment

CFS-IS / CP 611A

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods Dispose in a safe manner in accordance with local/national regulations.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to hazardous or special waste collection point, in accordance with local,

regional, national and/or international regulation.

Ecological information Avoid release to the environment.

European List of Waste (LoW, EC 2000/532) 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous

substances

HP Code HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one

or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name	,		
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)	,		
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Switzerland

Swiss National Regulations

Article 4, subparagraph 4 Order on the protection of young workers (OLT 5, RS 822.115) and Article 1, letter f Order of the DEFR on dangerous works for young workers (822.115.2): Young workers undergoing initial professional training cannot work with this product (this substance/this preparation) except where envisaged in the order of professional training to achieve the training purposes and if the training plan conditions and applicable age limits are respected. Young workers who do not undergo initial professional training cannot work with this product (this substance/this preparation). Workers of either sex aged under 18 years old are considered as young.

Artikel 13 Mutterschutzverordnung (SR 822.111.52):

Schwangere Frauen und stillende Mütter dürfen bei ihrer Arbeit nur dann mit dieser Zubereitung in Kontakt kommen oder dieser ausgesetzt werden, wenn auf Grund einer Risikobeurteilung durch eine Fachperson feststeht, dass im Kontext mit den Tätigkeiten und den getroffenen Schutzmassnahmen die Exposition zu keinen Schädigungen für Mutter und Kind führt.

Swiss CPID No 252485-19

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
16		Modified	

Abbreviations and acronyms:		
CAS-No.	Chemical Abstract Service number	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Abbreviations and acronyms:		
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
ED	Endocrine disrupting properties	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
IOELV	Indicative Occupational Exposure Limit Value	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
N.O.S.	Not Otherwise Specified	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
vPvB	Very Persistent and Very Bioaccumulative	
WGK	Water Hazard Class	
VOC	Volatile Organic Compounds	
SDS	Safety Data Sheet	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
PNEC	Predicted No-Effect Concentration	
РВТ	Persistent Bioaccumulative Toxic	
OEL	Occupational Exposure Limit	
OECD	Organisation for Economic Co-operation and Development	
COD	Chemical oxygen demand (COD)	
ThOD	Theoretical oxygen demand (ThOD)	
TRGS	Technical Rules for Hazardous Substances	
TLM	Median Tolerance Limit	
STP	Sewage treatment plant	

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

None.



Safety Data Sheet

Full text of H- and EUH-statements:		
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2	
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
EUH071	Corrosive to the respiratory tract.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H301	Toxic if swallowed.	
H302	Harmful if swallowed.	
H310	Fatal in contact with skin.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H330	Fatal if inhaled.	
H360D	May damage the unborn child.	
H361	Suspected of damaging fertility or the unborn child.	
H361d	Suspected of damaging the unborn child.	
H372	Causes damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Repr. 1B	Reproductive toxicity, Category 1B	
Repr. 2	Reproductive toxicity, Category 2	
Skin Corr. 1	Skin corrosion/irritation, Category 1	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C	



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements:		
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1A	Skin sensitisation, category 1A	
Skin Sens. 1B	Skin sensitisation, category 1B	
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Skin Sens. 1	H317	Calculation method	
Repr. 2	H361	Calculation method	
Aquatic Chronic 3	H412	Calculation method	

SDS_EU_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.